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ABSTRACT

The United States Training and Employment Service General Aptitude Test Battery (GATB), first published in 1947, has been included in a continuing program of research to validate the tests against success in many different occupations. The GATB consists of 12 tests which measure nine aptitudes: General Learning Ability; Verbal Aptitude; Numerical Aptitude; Spatial Aptitude; Form Perception; Clerical Perception; Motor Coordination; Finger Dexterity; and Manual Dexterity. The aptitude scores are standard scores with 100 as the average for the general working population, and a standard deviation of 20. Occupational norms are established in terms of minimum qualifying scores for each of the significant aptitude measures which, when combined, predict job performance. Cutting scores are set only for those aptitudes which aid in predicting the performance of the job duties of the experimental sample. The GATB norms described are appropriate only for jobs with content similar to that shown in the job description presented in this report. A description of the validation sample is also included. (RC)

TM

1975

U.S. Employment Service
Technical Report
S-259R75

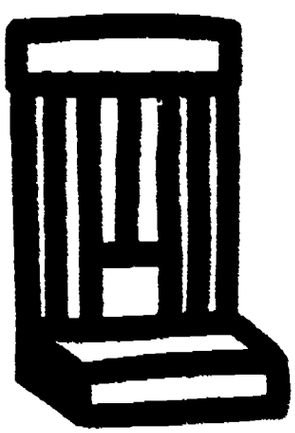
Development of USES

APTITUDE TEST BATTERY FOR

TELLER

(banking)
212.368

U.S. Department of Labor
Manpower Administration



Technical Report on Development of USES Specific Aptitude Test Battery

For

Teller (banking) 212.368

S-259R75

Developed in Cooperation with the
Alabama, Arizona, Arkansas, California, Colorado, Illinois, Kansas, Michigan, Minnesota, Missouri, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Rhode Island, Texas and Virginia State Employment Services

U. S. DEPARTMENT OF LABOR
Peter J. Brennan, Secretary

Manpower Administration
William H. Kolberg
Assistant Secretary for Manpower

1975

Development of USES Specific Aptitude Test Battery S-259R75

For

Teller (banking) 212.368

RESEARCH SUMMARY

This report describes the research which resulted in the development of the following Specific Aptitude Test Battery for use in selecting inexperienced or untrained individuals for training as Tellers:

Aptitudes	Cutting Scores
N - Numerical Aptitude	85
P - Form Perception	105
Q - Clerical Perception	110

Sample:
Validation sample: 291 Tellers (257 females and 34 males) employed in banks in the North, South and West (see Appendix 2). A total of 123 were minority group members (78 Blacks, 28 Spanish Surnamed, 9 Orientals, 4 American Indians, 1 French Canadian, 2 Filipinos and 1 Aleut) and 168 were nonminority group members.

Cross-validation sample #1: 59 Tellers (48 females and 11 males) employed in banks in the North (see Appendix 2). Twenty-eight were Blacks and 31 were nonminority group members.

Cross-validation sample #2: 50 Tellers (41 females and 9 males) employed in banks in the West. This study was conducted prior to the requirement of providing minority group information. Therefore, minority group status of sample members is unknown.

Cross-validation sample #3: 50 Tellers (43 females and 7 males) employed in banks in the North. This study was conducted prior to the requirement of providing minority group information. Therefore, minority group status of sample members is unknown.

Criterion:
Validation sample: Supervisory ratings. Criterion data were collected during 1973.

Cross-validation sample #1: Multiple hurdle of supervisory ratings and "Teller Differences". Criterion data were collected during 1973.

Cross-validation sample #2: Supervisory ratings. Criterion data were collected during 1962.

Cross-validation sample #3: Supervisory ratings. Criterion data were collected during 1961.

Design:
Concurrent (test and criterion data were collected at about the same time).

Validity:
Validation Sample:
Phi coefficient for total sample = .24 (P/2 < .0005)
Phi coefficient for Black subsample = .19 (P/2 < .05)
Phi coefficient for nonminority subsample = .24 (P/2 < .005)

Cross-validation sample #1:
Phi coefficient for total sample = .42 (P/2 < .005)

Cross-validation sample #2:
Phi coefficient for total sample = .26 (P/2 < .05)

Cross-validation sample #3:
Phi coefficient for total sample = .31 (P/2 < .025)

Combined samples:
Phi coefficient for male subsample = .35 (P/2 < .005)
Phi coefficient for female subsample = .27 (P/2 < .0005)

Effectiveness of Battery for Validation Sample:
For the total validation sample, 63% of the sample were in the high criterion group; if they had been test-selected with this battery 72% would have been in the high criterion group; 37% of the sample were in the low criterion group; if they had been test-selected with this battery 28% would have been in the low criterion group. The effectiveness of the battery is shown in Table 1.

TABLE 1

Effectiveness of Battery for Validation Sample

	Without Tests	With Tests
High Criterion Group	63%	72%
Low Criterion Group	37%	28%

Comparison of Minority and Nonminority Groups:
No differential validity was found for this battery. The difference between the phi coefficients for Black and nonminority groups for the validation sample is not statistically significant (CR = -.38). The battery is fair to Blacks since the percent of Blacks who met the cutting scores approximated the percent who were in the high criterion group. 44% of the Blacks met the cutting scores and 54% were in the high criterion group.

Comparison of Sex Subgroups:
No differential validity was found for this battery. The difference between the phi coefficient for male and female subgroups for the combined validation and cross-validation samples is not statistically significant (CR = .64).

The battery is fair to both males and females. The percentage of males and females who met the cutting scores approximated the percentage who were in the high criterion group. 64% of the males met the cutting scores and 57% were in the high criterion group; 63% of the females met the cutting scores and 64% were in the high criterion group.

JOB ANALYSIS

A job analysis was performed by observation of the workers' performance on the job and in consultation with the workers' supervisors. On the basis of the job analysis, the job description shown in Appendix 4 was prepared, which was used to (1) select an experimental sample of workers who were performing the job duties; (2) choose an appropriate criterion or measure of job performance; (3) determine which aptitudes are critical, important or irrelevant to job performance (see Tables 2 and 5); and (4) provide information on the applicability of the test battery resulting from this research.

TABLE 2

Qualitative Analysis

Aptitude	Rationale
G - General Learning Ability	Required to use judgment and to learn the rules, practices and procedures involved in various financial transactions.
N - Numerical Aptitude	Required to count money, make change, and compute interest, credits and debits.
P - Form Perception	Required to note in detail the markings, shapes and shadings on bills in order to detect counterfeit currency.
Q - Clerical Perception	Required to maintain and check records and to verify signatures.
K - Motor Coordination	Required to count currency quickly.
F - Finger Dexterity	Required to handle money and to operate business machines.

EXPERIMENTAL TEST BATTERY

All 12 tests of the GATB, B-1002B, were administered to the validation sample and cross-validation sample #1 and all 12 tests of the GATB, B-1002A, were administered to cross-validation samples #2 and #3.

CRITERIA

Validation Sample:
The immediate supervisor rated each worker. The ratings were obtained by means of personal visits of State test development analysts who explained the rating procedure to the supervisors. Two ratings were obtained from each supervisor with an interval of at least two weeks between the ratings. Since sample members' test scores are confidential, supervisors had no knowledge of the test scores of the workers.

A descriptive rating scale was used. The scale (see Appendix 3) consists of six items. Five of these items cover different aspects of job performance. The sixth item is a global item on the Teller's "all-around" ability. Each item has five alternative responses corresponding to different degrees of job proficiency. For the purpose of scoring the items, weights of 1 to 5 were assigned to the responses. The total score on the rating scale is the sum of the weights for the six items. The possible range for each rating is 6 - 30.

A review of the job description indicated that the subjects covered by the rating scale were directly related to important aspects of job performance.

A - Amount of work: Tellers must work quickly and efficiently in order to serve bank customers without unreasonable delay.

B - Quality of work: Teller's work must meet the high quality standards established by the bank.

C - Accuracy of work: Teller must avoid making mistakes in any of the transactions that are handled.

D - Amount of knowledge: Teller must have sufficient knowledge of procedures and bank policy to perform the job adequately.

E - Variety of job duties: Teller must be able to perform many different transactions such as handling deposits and withdrawals, cashing checks, and cashing government bonds.

F - "All-around" ability: Teller's value to employer involves a combination of the aspects of job performance listed above.

A reliability coefficient of .84 was obtained between the initial ratings and the re-ratings, indicating a significant relationship. Therefore, the final criterion score consists of the combined scores of the two ratings. The possible range for the final criterion is 12 - 60. The actual range is 23-60. The mean is 44.1 with a standard deviation of 7.8. The relationship between the criterion and age, education and job experience is shown in Table 3.

TABLE 3

Means, Standard Deviations (SD) and Pearson Product-Moment Correlations with the Criterion (r) for Age, Education and Experience

Validation Sample

	Mean	SD	r
Age (years)	28.3	8.8	.084
Education (years)	12.9	1.4	.009
Experience (months on current job)	31.1	38.5	.222**
Total Experience (months)	42.3	42.7	.231**

**Significant at the .01 level

About one-third of the workers are considered to be marginal workers. Therefore, the criterion distribution was dichotomized so as to include about one-third of the sample in the low criterion group and the remainder in the high criterion group. The criterion cutting score was set at 42 which places 37% in the low criterion group and 63% in the high criterion group. It was not possible to place precisely one-third of the workers in the low criterion group because of the nature of the criterion distribution.

Cross-validation Sample #1:
The first criterion consisted of two different supervisory ratings obtained from the immediate supervisor. The ratings were obtained by means of personal visits of State test development analysts who explained the rating procedure to the supervisors. Since sample members' test scores are confidential, supervisors had no knowledge of the test scores of the workers.

The first supervisory rating was obtained using the same descriptive rating scale as was used with the validation sample (see Appendix 3). The second rating was obtained two weeks after the first, using a mixed standard scale (see Appendix 3). This scale was constructed by taking the middle three choices from each of the six items on the descriptive rating scale to make a total of 18 statements which were arranged in random order. The rater was

instructed to rate each Teller by judging him to be better than, about the same as, or worse than each statement. The three items covering the same aspect of job performance (speed, quality, accuracy, job knowledge, variety of job duties, and over-all worth) were scored as a unit. The possible range of scores for each unit was 1 - 7, depending upon the pattern of the responses. For example, if a Teller was judged to be better than all three of the statements, his score on that unit was 7; if worse than all three statements, his score was 1.

A reliability coefficient of .94 was obtained between the mixed standard scale and the descriptive rating scale, indicating a significant relationship. Therefore, the final supervisory rating score consisted of the averaged standard scores for the descriptive rating scale and the mixed standard scale. The possible range is 40 - 160. The actual range is 50-146. The mean is 100.0 and the standard deviation is 19.9

The second criterion measure consisted of Teller differences which were the total number of overages or shortages of $5.00 or more made by the Teller during the first six months on the job. Tellers were ranked on these differences and the ranks converted to standard scores. The possible range of standard scores for Teller differences is 5 - 95. The actual range is 5 - 87. The mean is 49.9 and the standard deviation is 18.7.

The relationships between age, education and job experience and the criteria are shown in Table 3a.

TABLE 3a

Means, Standard Deviations (SD) and Pearson Product-Moment Correlations with Supervisory Ratings (r_1) and Teller Differences (r_2) for Age, Education and Experience

Cross-validation Sample #1

	Mean	SD	r_1	r_2
Age (years)	24.8	5.7	.151	.226
Education (years)	12.8	1.2	.007	.057
Experience (months on current job)	24.4	19.5	.374**	.102

**Significant at the .01 level

About one-third of the workers are considered to be marginal workers. Therefore, the criterion distribution was dichotomized so as to include about one-third of the sample in the low criter-

ion group and the remainder in the high criterion group. The criterion cutting score was set at 74 for supervisory ratings and 43 for Teller differences which places 39% in the low criterion group and 61% in the high criterion group. It was not possible to place precisely one-third of the workers in the low criterion group because of the nature of the criterion distribution.

Cross-validation Sample #2:
The Assistant Manager and Operations Officer rated each worker. The ratings were obtained by means of personal visits of the State test development analysts who explained the rating procedure to the supervisors. Two ratings were obtained from each supervisor with an interval of at least two weeks between the ratings. Since sample members' test scores are confidential, supervisors had no knowledge of the test scores of the workers.

A descriptive rating scale was used. The scale (see Appendix 3) consists of nine items. Eight of these items cover different aspects of job performance. The ninth item is a global item on the Teller's "all-around" ability. Each item has four alternative responses corresponding to different degrees of job proficiency. For the purpose of scoring the items, weights of 1 to 4 were assigned to the responses. The total score on the rating scale is the sum of the weights for the nine items. The possible range for each rating is 9 - 36.

A review of the job description indicated that the subjects covered by the rating scale were directly related to important aspects of job performance.

A - Quantity of work: Teller must work quickly and efficiently in order to serve bank customers without unreasonable delay.

B - Quality of work: Teller's work must meet the high quality standards established by the bank.

C - Accuracy of work: Teller must avoid making mistakes in any of the transactions that are handled.

D - Job knowledge: Teller must have sufficient knowledge of procedures and bank policy to perform the job adequately.

E - Aptitude for job: Teller must be able to perform the job duties without difficulty.

F - Job versatility: Teller must be able to perform many different transactions, such as handling deposits and withdrawals, cashing checks and cashing government bonds.

G - Job resourcefulness: Teller must be able to apply knowledge to new situations and customer requests and act accordingly.

H - Job initiative: Teller should be able to notice ways and make suggestions to improve work methods so that bank operations can be performed more efficiently.

I - "All-around" job ability: Teller's value to employer involves a combination of the aspects of job performance listed above.

Reliability coefficients of .90 were obtained for ratings and re-ratings made by the Assistant Manager and Operations Officer. Since the relationship between the combined Assistant Manager's ratings and combined Operation Officer's rating was .72; the four sets of ratings for individuals in the sample were combined. The possible range for the final criterion is 36-144. The actual range is 41-154. The mean is 96.9 with a standard deviation of 20.2. The relationship between the criterion and age, education and job experience is shown in Table 3b.

TABLE 3b

Means, Standard Deviations (SD) and Pearson Product-Moment Correlations with the Criterion (r) for Age, Education and Experience

Cross-validation Sample #2

	Mean	SD	r
Age (years)	31.3	8.5	-.040
Education (years)	12.6	.9	-.274
Experience (months)	31.0	25.9	.337*

*Significant at the .05 level

About one-third of the workers are considered to be marginal workers. Therefore, the criterion distribution was dichotomized so as to include about one-third of the sample in the low criterion group and the remainder in the high criterion group. The criterion cutting score was set at 93 which places 36% in the low criterion group and 64% in the high criterion group. It was not possible to place precisely one-third of the workers in the low criterion group because of the nature of the criterion distribution.

Cross-validation Sample #3:
The immediate supervisor rated each worker. The ratings were obtained by means of personal visits of State test development analysts who explained the rating procedure to the supervisors. Two ratings were obtained from each supervisor with an interval of at least two weeks between the ratings. Since sample members' test scores are confidential, supervisors had no knowledge of the test scores of the workers.

A descriptive rating scale was used. The scale (see Appendix 3) consisted of the same nine items as used with Cross-validation Sample #2. Each item has five alternative responses corresponding to different degrees of job proficiency. For the purpose of scoring the items, weights of 1 to 5 were assigned to the responses. The total score on the rating scale is the sum of the weights for the nine items. The possible range for each rating is 9 - 45.

A reliability coefficient of .90 was obtained between the initial ratings and re-ratings. Therefore, the final criterion score consisted of the averaged scores of the two ratings. The averaged scores were multiplied by ten to eliminate the decimal. The possible range of the final criterion is 90 - 450. The actual range is 220 - 425. The mean is 346.0 with a standard deviation of 51.3. The relationship between the criterion and age, education and job experience is shown in Table 3c.

TABLE 3c

Means, Standard Deviations (SD) and Pearson Product-Moment Correlations with the Criterion (r) for Age, Education and Experience

Cross-validation Sample #3

	Mean	SD	r
Age (years)	31.8	9.7	-.277
Education (years)	12.3	1.2	-.284*
Experience (months on current job)	36.6	27.0	-.074
Total Experience (months)	55.3	32.0	.007

*Significant at the .05 level

About one-third of the workers are considered to be marginal workers. Therefore, the criterion distribution was dichotomized so as to include about one-third of the sample in the low criterion group and the remainder in the high criterion group. The criterion cutting score was set at 330 which places 34% in the low criterion group and 66% in the high criterion group.

SAMPLE

Validation Sample:
The validation sample consisted of 291 Tellers (257 females and 34 males) employed in various banks in the North, South and West (see Appendix 2). A total of 123 were minority group members (78 Blacks, 28 Spanish Surnamed, 9 Orientals, 4 American Indians, 1 French Canadian, 2 Filipinos and 1 Aleut) and 168 were nonminority group members. The means and standard deviations for age, education and experience of the sample members are shown in Table 3. A pre-employment test (Wonderlic Personnel Test, Short Employment Tests, Factored Aptitude Series, Minnesota Clerical Test or Otis Employment Tests) was used for selection of some sample members. All workers had at least seven months of total job experience in a job with duties similar to those found in Appendix 4. Descriptive statistics for subgroups are shown in Appendix 1.

Cross-validation Sample #1:
The cross-validation sample consisted of 59 Tellers (48 females and 11 males) employed by three banks in New York (see Appendix 2). A total of 28 were Blacks and 31 were nonminority group members. The means and standard deviations for age, education and experience of sample members are shown in Table 3a. No sample members were test-selected. All workers had at least six months of total job experience in a job with duties similar to those found in the job description in Appendix 4.

Cross-validation Sample #2:
Cross-validation sample #2 consisted of 50 Tellers (41 females and 9 males) employed by two banks in Arizona (see Appendix 2). This study was conducted prior to the requirement of providing minority group information on sample members; therefore, minority group information is not known. No sample members were test-selected on a test other than a personality test. The means and standard deviations for age, education and experience of sample members are shown in Table 3b. All workers had at least 7 months of total job experience in jobs with duties similar to those shown in the job description in Appendix 4.

Cross-validation Sample #3:
Cross-validation sample #3 consisted of 50 Tellers (43 females and 7 males) employed by three banks in Michigan (see Appendix 2). The study was conducted prior to the requirement of providing minority group information on sample members; therefore, minority group information is not known. No sample members were test-selected. The means and standard deviations for age, education and experience of sample members are shown in Table 3c. All workers had at least 12 months of total job experience in jobs with duties similar to those shown in the job description in Appendix 4.

STATISTICAL RESULTS

TABLE 4

Statistical Results for Validation Sample

N=291

Aptitude	Mean	SD	r
G - General Learning Ability	103.2	16.4	.157**
V - Verbal Aptitude	104.4	15.7	.168**
N - Numerical Aptitude	104.7	16.5	.235**
S - Spatial Aptitude	102.6	17.9	.009
P - Form Perception	118.6	19.6	.182**
Q - Clerical Perception	125.6	16.8	.201**
K - Motor Coordination	117.3	15.8	.054
F - Finger Dexterity	105.5	20.0	.067
M - Manual Dexterity	105.6	19.8	.100

** Significant at the .01 level

Table 5 summarizes the qualitative analysis and statistical results shown in Tables 2 and 4 and shows the aptitudes considered for inclusion in the battery.

TABLE 5

Summary of Qualitative and Quantitative Data for Validation Sample

Type of Evidence	Aptitudes								
	G	V	N	S	P	Q	K	F	M
"Critical" on Basis of Job Analysis									
"Important" on Basis of Job Analysis	X		X		X	X	X	X	
"Irrelevant" on Basis of Job Analysis									
Relatively High Mean					X	X	X		
Relatively Low Standard Deviation									
Significant Correlation with Criterion	X	X	X		X	X			
Aptitudes Considered for Inclusion in the Battery	G	V	N		P	Q	K		

The information in Table 5 indicates that the following aptitudes should be considered for inclusion in the battery: G, V, N, P, Q and K. The objective is to develop a battery of 2, 3 or 4 aptitudes with cutting scores set at five point intervals at the point (a) where about the same percent will meet the cutting scores as the percent placed in the high criterion group and (b) which will maximize the relationship between the battery and the criterion. The cutting scores are set at approximately one standard deviation below the mean aptitude scores of the sample, with deviations above or below these points to achieve the objectives indicated above.

The following battery resulted:

Aptitudes	Cutting Scores
N - Numerical Aptitude	85
P - Form Perception	105
Q - Clerical Perception	110

VALIDITY OF THE BATTERY

TABLE 6
Validity of Battery for Total Validation Sample

	Below Cutting Scores	Meeting Cutting Scores	Total
High Criterion Group	50	134	184
Low Criterion Group	55	52	107
Total	105	186	291

Phi coefficient = .24
Significance level = P/2 < .0005

TABLE 6a
Validity of Battery for Black Validation Subsample

	Below Cutting Scores	Meeting Cutting Scores	Total
High Criterion Group	20	22	42
Low Criterion Group	24	12	36
Total	44	34	78

Phi coefficient = .19
Significance level = P/2 < .05

TABLE 6b
Validity of Battery for Nonminority Validation Subsample

	Below Cutting Scores	Meeting Cutting Scores	Total
High Criterion Group	23	88	111
Low Criterion Group	25	32	57
Total	48	120	168

Phi coefficient = .24
Significance level = P/2 < .005

TABLE 7
Validity of Battery for Cross-validation Sample #1

	Below Cutting Scores	Meeting Cutting Scores	Total
High Criterion Group	6	30	36
Low Criterion Group	14	9	23
Total	20	39	59

Phi coefficient = .42 (Yates' corrected)
Significance level = P/2 < .005

TABLE 8
Validity of Battery for Cross-validation Sample #2

	Below Cutting Scores	Meeting Cutting Scores	Total
High Criterion Group	8	24	32
Low Criterion Group	10	8	18
Total	18	32	50

Phi coefficient = .26 (Yates' corrected)
Significance level = P/2 < .05

TABLE 9
Validity of Battery for Cross-validation Sample #3

	Below Cutting Scores	Meeting Cutting Scores	Total
High Criterion Group	11	22	33
Low Criterion Group	12	5	17
Total	23	27	50

Phi coefficient = .31 (Yates' corrected)
Significance level = P/2 < .025

TABLE 10
Validity of Battery for Male Subsample
Combined Validation and Cross-validation Samples

	Below Cutting Scores	Meeting Cutting Scores	Total
High Criterion Group	7	28	35
Low Criterion Group	15	11	26
Total	22	39	61

Phi coefficient = .35 (Yates' corrected)
Significance level = P/2 < .005

TABLE 10a
Validity of Battery for Female Subsample
Combined Validation and Cross-validation Samples

	Below Cutting Scores	Meeting Cutting Scores	Total
High Criterion Group	68	182	250
Low Criterion Group	76	63	139
Total	144	245	389

Phi coefficient = .27
Significance level = P/2 < .0005

OCCUPATIONAL APTITUDE PATTERN

This occupation was incorporated into OAP-33 in Section II of the 1970 edition of the Manual for the USES General Aptitude Test Battery with an asterisk (*) since (1) the battery included the same aptitudes as those in the OAP, (2) the cutting scores of the aptitudes in the battery were within ten points of the cutting scores of the aptitudes and (3) a significant phi coefficient was obtained between the criterion and the OAP-33 cutting scores of N-95, P-100 and Q-105. A phi coefficient of .18 (P/2 < .0005) was obtained for the combined validation and cross-validation samples.

APPENDIX 1

Descriptive Statistics for Black and Nonminority Subgroups of Validation Sample

	Black (N=78)			Nonminority (N=168)		
Variable	Mean	SD	Range	Mean	SD	Range
Aptitude G	92.0	13.9	65-125	109.5	15.0	70-154
Aptitude V	95.8	13.4	72-131	109.9	14.6	72-149
Aptitude N	94.7	14.9	59-130	110.2	14.7	74-159
Aptitude S	93.8	16.7	58-130	106.4	18.2	68-147
Aptitude P	112.2	18.4	72-156	121.5	20.0	73-183
Aptitude Q	119.2	13.7	90-154	128.9	16.7	90-179
Aptitude K	117.4	13.3	82-146	116.3	15.8	74-155
Aptitude F	104.4	19.4	55-146	104.9	21.9	53-161
Aptitude M	104.4	18.7	71-153	105.5	19.8	53-161
Criterion	42.3	7.9	24-58	44.9	8.1	23-60
Age	26.4	4.6	19-40	29.6	10.4	17-54
Education	12.8	1.2	12-16	12.8	1.4	10-19
Experience (months on current job)	20.9	14.1	1-66	35.1	44.2	1-252
Total Experience (months)	28.2	13.2	7-92	49.0	43.0	7-252

Descriptive Statistics for Female and Male Subgroups of Validation Sample

	Female (N=257)			Male (N=34)		
Variable	Mean	SD	Range	Mean	SD	Range
Aptitude G	102.2	16.1	65-154	110.4	17.3	77-154
Aptitude V	104.3	15.7	72-149	104.4	15.9	74-143
Aptitude N	103.7	16.2	59-159	112.3	16.7	75-151
Aptitude S	101.3	17.6	58-147	112.4	16.8	74-147
Aptitude P	118.9	19.8	66-183	116.6	17.9	75-154
Aptitude Q	126.3	17.0	90-179	120.7	13.8	93-146
Aptitude K	117.3	15.7	82-159	117.7	16.9	84-153
Aptitude F	105.3	20.5	53-152	107.2	23.6	57-161
Aptitude M	105.1	19.2	53-159	109.8	23.6	61-161
Criterion	44.3	7.7	23-60	42.4	8.4	24-60
Age	28.8	9.1	18-54	24.7	5.7	17-53
Education	12.8	1.3	10-16	13.7	1.8	12-19
Experience (months on current job)	32.7	40.4	1-252	19.6	14.4	2-60
Total Experience (months)	43.9	44.6	7-252	29.9	20.1	7-92

APPENDIX 2

Geographic Distribution of Validation Sample

	Black Subsample	Total Sample
North	44	106
South	20	77
West	14	108
Total	78	291

Organizations Contributing Samples for Validation Study

North
Exchange National Bank, Chicago, Illinois
First National Bank of Chicago, Chicago, Illinois
Hyde Park Bank, Chicago, Illinois
University National Bank, Chicago, Illinois
Douglass State Bank, Kansas City, Kansas
Home State Bank, Kansas City, Kansas
Huron Valley National Bank, Ann Arbor, Michigan
National Bank and Trust of Ann Arbor, Ann Arbor, Michigan
First Independence National Bank of Detroit, Detroit, Michigan
American National and Trust Company of Michigan, Kalamazoo, Michigan
First National Bank of Minneapolis, Minneapolis, Minnesota
Northwestern National Bank of Minneapolis, Minneapolis, Minnesota
Commerce Bank of Kansas City, Kansas City, Missouri
Swope Parkway National Bank, Kansas City, Missouri
Trader's National Bank, Kansas City, Missouri
United Missouri Bank of Kansas City, Kansas City, Missouri
First National State Bank, Newark, New Jersey
Huntington National Bank, Columbus, Ohio
Ohio National Bank, Columbus, Ohio
Old Stone Bank, Providence, Rhode Island

South
Birmingham Trust National Bank, Birmingham, Alabama
Exchange Security Bank, Birmingham, Alabama
First National Bank, Birmingham, Alabama
American National Bank and Trust Company, Mobile, Alabama
Union Bank and Trust Company, Montgomery, Alabama
Deposit National Bank, Pritchard, Alabama
First American National Bank, North Little Rock, Arkansas
National Bank of Commerce, Pine Bluff, Arkansas
Simmons First National Bank, Pine Bluff, Arkansas
Central Carolina Bank, Durham, North Carolina

Austin National Bank, Austin, Texas
Broadway National Bank, San Antonio, Texas
First Federal Savings and Loan Association of San Antonio, San Antonio, Texas
Frost National Bank, San Antonio, Texas
National Bank of Commerce, San Antonio, Texas
San Antonio Savings Association, San Antonio, Texas
Southern Bank, Inc., Richmond, Virginia

West
Crocker National Bank, Los Angeles, California
First Western Bank, Los Angeles, California
United California Bank, Los Angeles, California
Colorado Springs National Bank, Colorado Springs, Colorado
East Colorado Springs National Bank, Colorado Springs, Colorado
American National Bank, Denver, Colorado
Central Bank and Trust Company, Denver, Colorado
Colorado State Bank, Denver, Colorado
Fort Carson National Bank, Fort Carson, Colorado
Republic National Bank, Pueblo, Colorado
United Bank of Pueblo, Pueblo, Colorado
Valley Bank, Las Vegas, Nevada
Albuquerque National Bank, Albuquerque, New Mexico
First State Bank of Oregon, Milwaukee, Oregon
First National Bank of Oregon, Portland, Oregon
Freedom Bank of Finance, Portland, Oregon

Organizations Contributing Samples for Cross-validation Study #1

Buffalo Savings Bank, Buffalo, New York
Merchant and Traders Bank, Buffalo, New York
Midland Marine Bank, Buffalo, New York

Organizations Contributing Samples for Cross-validation Study #2

Arizona Bank, Phoenix, Arizona
Valley National Bank, Phoenix, Arizona

Organizations Contributing Samples for Cross-validation Study #3

American National Bank and Trust Company, Kalamazoo, Michigan
First National Bank and Trust Company, Kalamazoo, Michigan
Industrial State Bank, Kalamazoo, Michigan

U.S. DEPARTMENT OF LABOR • MANPOWER ADMINISTRATION

APPENDIX 3

DESCRIPTIVE RATING SCALE FOR VALIDATION AND CROSS-VALIDATION SAMPLE #1

SCORE _____

RATING SCALE FOR _____

D.O.T. Title and Code

Directions: Please read the "Suggestions to Raters" and then fill in the items which follow. In making your ratings, only one box should be checked for each question.

SUGGESTIONS TO RATERS

We are asking you to rate the job performance of the people who work for you. These ratings will serve as a "yardstick" against which we can compare the test scores in this study. The ratings must give a true picture of each worker or this study will have very little value. You should try to give the most accurate ratings possible for each worker.

These ratings are strictly confidential and won't affect your workers in any way. Neither the ratings nor test scores of any workers will be shown to anybody in your company. We are interested only in "testing the tests." Ratings are needed only for those workers who are in the test study.

Workers who have not completed their training period, or who have not been on the job or under your supervision long enough for you to know how well they can perform this work should not be rated. Please inform the test technician about this if you are asked to rate any such workers.

Complete the last question only if the worker is no longer on the job.

In making ratings, don't let general impressions or some outstanding trait affect your judgment. Try to forget your personal feelings about the worker. Rate only on the work performed. Here are some more points which might help you:

1. Please read all directions and the rating scale thoroughly before rating.

2. For each question compare your workers with "workers-in-general" in this job. That is, compare your workers with other workers on this job that you have known. This is very important in small plants where there are only a few workers. We want the ratings to be based on the same standard in all the plants.

3. A suggested method is to rate all workers on one question at a time. The questions ask about different abilities of the workers. A worker may be good in one ability and poor in another: for example, a very slow worker may be accurate. So rate all workers on the first question, then rate all workers on the second question, and so on.

4. Practice and experience usually improve a worker's skill. However, one worker with six months' experience may be a better worker than another with six years' experience. Don't rate one worker as poorer than another merely because of a lesser amount of experience.

5. Rate the workers according to the work they have done over a period of several weeks or months. Don't rate just on the basis of one "good" day, or one "bad" day or some single incident. Think in terms of each worker's usual or typical performance.

6. Rate only the abilities listed on the rating sheet. Do not let factors such as cooperativeness, ability to get along with others, promptness and honesty influence your ratings. Although these aspects of a worker are important, they are of no value for this study as a "yardstick" against which to compare aptitude test scores.

MA 7-66
Apr. 1973

NAME OF WORKER (Print) (Last) (First)

SEX: MALE_____ FEMALE_____

Company Job Title: _____

How often do you see this worker in a work situation?

- ☐ All the time.
- ☐ Several times a day.
- ☐ Several times a week.
- ☐ Seldom.

How long have you worked with this worker?

- ☐ Under one month.
- ☐ One to two months.
- ☐ Three to five months.
- ☐ Six months or more.

A. How much can this worker get done? (Worker's ability to make efficient use of time and to work at high speed.) (If it is possible to rate only the quantity of work which a person can do on this job as adequate or inadequate, use #2 to indicate "inadequate" and #4 to indicate "adequate.")

- ☐ 1. Capable of very low work output. Can perform only at an unsatisfactory pace.
- ☐ 2. Capable of low work output. Can perform at a slow pace.
- ☐ 3. Capable of fair work output. Can perform at an acceptable pace.
- ☐ 4. Capable of high work output. Can perform at a fast pace.
- ☐ 5. Capable of very high work output. Can perform at an unusually fast pace.

B. How good is the quality of work? (Worker's ability to do high-grade work which meets quality standards.)

- ☐ 1. Performance is inferior and almost never meets minimum quality standards.
- ☐ 2. Performance is usually acceptable but somewhat inferior in quality.
- ☐ 3. Performance is acceptable but usually not superior in quality.
- ☐ 4. Performance is usually superior in quality.
- ☐ 5. Performance is almost always of the highest quality.

C. How accurate is the work? (Worker's ability to avoid making mistakes.)

- ☐ 1. Makes very many mistakes. Work needs constant checking.
- ☐ 2. Makes frequent mistakes. Work needs more checking than is desirable.
- ☐ 3. Makes mistakes occasionally. Work needs only normal checking.
- ☐ 4. Makes few mistakes. Work seldom needs checking.
- ☐ 5. Rarely makes a mistake. Work almost never needs checking.

MA 7-66
Apr. 1973

D. How much does the worker know about the job? (Worker's understanding of the principles, equipment, materials and methods that have to do directly or indirectly with the work.)

- ☐ 1. Has very limited knowledge. Does not know enough to do the job adequately.
- ☐ 2. Has little knowledge. Knows enough to get by.
- ☐ 3. Has moderate amount of knowledge. Knows enough to do fair work.
- ☐ 4. Has broad knowledge. Knows enough to do good work.
- ☐ 5. Has complete knowledge. Knows the job thoroughly.

E. How large a variety of job duties can the worker perform efficiently? (Worker's ability to handle several different operations.)

- ☐ 1. Cannot perform different operations adequately.
- ☐ 2. Can perform a limited number of different operations efficiently.
- ☐ 3. Can perform several different operations with reasonable efficiency.
- ☐ 4. Can perform many different operations efficiently.
- ☐ 5. Can perform an unusually large variety of different operations efficiently.

F. Considering all the factors already rated, and only these factors, how good is this worker? (Worker's all-around ability to do the job.)

- ☐ 1. Performance usually not acceptable.
- ☐ 2. Performance somewhat inferior.
- ☐ 3. A fairly proficient worker.
- ☐ 4. Performance usually superior.
- ☐ 5. An unusually competent worker.

Complete the following ONLY if the worker is no longer on the job.

G. What do you think is the reason this person left the job? (It is not necessary to show the official reason if you feel that there is another reason, as this form will not be shown to anybody in the company.)

- ☐ 1. Fired because of inability to do the job.
- ☐ 2. Quit, and I feel that it was because of difficulty doing the job.
- ☐ 3. Fired or laid off for reasons other than ability to do the job (i.e., absenteeism, reduction in force).
- ☐ 4. Quit, and I feel the reason for quitting was not related to ability to do the job.
- ☐ 5. Quit or was promoted or reassigned because the worker had learned the job well and wanted to advance.

RATED BY	TITLE	DATE
COMPANY OR ORGANIZATION	LOCATION (City, State, ZIP Code)	

GPO 863.716

MA 7-66
Apr. 1973

Rating Sca.e for Cross-validation Sample #1

Adaptation of the Descriptive Rating Scale to Conform to the Blanz and Ghiselli Mixed Standard Scale Method of Rating

Rating Employees

We are asking you to rate the performance of the employees under your supervision on a variety of abilities they have manifested while under your supervision. These ratings will serve as a "yardstick" against which we can compare the aptitude test results obtained in this study. The ratings you make are strictly confidential and will not affect the employee in any way. Neither the ratings nor test scores will be shown to anyone other than the research personnel involved in the study. We are only interested in "testing the tests". Ratings are needed for only those personnel for whom we have test results. The ratings must give a true picture of each employee or this study will have very little value. You should strive to give the most accurate rating possible for each employee.

In making ratings, do not let general impressions or some outstanding trait affect your judgment. Try to forget your personal feelings about the employee. Rate him only on his performance. Don't rate just on the basis of one "good" day, one "bad" day or some single incident. Rate the employees according to the work they have done throughout the period while under your supervision.

In addition, rate only on the abilities included in this rating packet. Do not let factors such as promptness, courtesy or honesty influence your ratings. Although these aspects of a worker are important, they are not measurable in the aptitude tests which have been administered to the employees.

Each performance characteristic in the rating packet appears on a separate page and should be rated for each employee. Each of the sample members whom you have supervised is listed below the specific rating characteristic in which we are interested.

Three degrees of performance are described for each performance characteristic as follows:

Make a plus (+) mark if the employee is better than the description.

Make a check (✓) mark if the employee fits the description.

Make a minus (-) mark if the employee is worse than the description.

After a brief description of the performance characteristic on which the employee is to be appraised, a more specific aspect of the performance characteristic is described on which you are to rate the employee.

For example:

> Performance characteristic: Worker's ability to apply what he already knows to a new situation. The specific aspect of this performance characteristic on which the employee is to be rated is as follows:
>
> > Sometimes knows what to do; sometimes doesn't. Can deal with problems that are not too complex.

For each employee, you are to make either a +, √, or - mark next to the name of the employee listed.

Name of Employee	Rating
Brown	+
Smith	√
Jones	√
Adams	-

These marks indicate that you judge that Brown rarely needs help, even on complex problems. You think, therefore that Brown is better than the description and indicate your judgment by making a + mark. You judge that Smith and Jones sometimes know what to do and sometimes don't. In other words they fit the description so you indicate this by placing a √ mark next to their names. On the other hand, Adams usually needs help on even minor problems, you indicate this by making a - mark next to Adams' name to indicate that he is worse than the description.

Adaptation of the Descriptive Rating Scale to Conform to the
Blanz and Ghiselli
Mixed Standard Scale Method of Rating
(For Aptitude Test Development Studies)

Rating Scale for_____ Date_____
D.O.T. Title and Code

Rated by_____ Title_____

Name & Location of Company_____

EMPLOYEE	How often do you see him at work? Several Times a day	Several Times a week	Seldom see him
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

EMPLOYEE	Circle the number of months you have worked with him.
_____	1 2 3 4 5 6 7 8 9 10 11 12 or more
_____	1 2 3 4 5 6 7 8 9 10 11 12 or more
_____	1 2 3 4 5 6 7 8 9 10 11 12 or more
_____	1 2 3 4 5 6 7 8 9 10 11 12 or more
_____	1 2 3 4 5 6 7 8 9 10 11 12 or more
_____	1 2 3 4 5 6 7 8 9 10 11 12 or more
_____	1 2 3 4 5 6 7 8 9 10 11 12 or more
_____	1 2 3 4 5 6 7 8 9 10 11 12 or more

MA 7-66 Mixed Standard Scale

Performance Characteristic: Worker's "all-around ability" to do his job.

Of limited value to the organization. Performance somewhat inferior.

+ = Employee is better than this statement.

√ = Statement fits the employee.

- = Employee is worse than this statement.

NAME	MARK

Each performance characteristic appeared on a separate page. The format of the rating scale is shown by the sample on the preceding page. A complete list of the performance characteristics follows:

1. Performance Characteristic:
   Worker's "all-around ability" to do his job.

   Of limited value to the organization. Performance somewhat inferior.

2. Performance Characteristic:
   Worker's ability to do high-grade work which meets quality standards.

   Performance was acceptable but usually not superior in quality.

3. Performance Characteristic:

   Worker's understanding of the principles, equipment, materials and methods that have to do directly or indirectly with his work.

   Has moderate amount of knowledge. Knows enough to do fair work.

4. Performance Characteristic:
   Worker's ability to handle several different operations in his work.

   Can perform many different operations efficiently.

5. Performance Characteristic:
   Worker's ability to avoid making mistakes.

   Makes mistakes occasionally. Work needs only normal checking.

6. Performance Characteristic:
Worker's ability to make efficient use of his time and to work at high speed.

Capable of high work output. Can perform at a fast pace.

7. Performance Characteristic:
Worker's understanding of the principles, equipment, materials and methods that have to do directly or indirectly with his work.

Has broad knowledge. Knows enough to do good work.

8. Performance Characteristic:
Worker's ability to avoid making mistakes.

Makes few mistakes. Work seldom needs checking.

9. Performance Characteristic:
Worker's ability to do high-grade work which meets quality standards.

Performance was usually acceptable but somewhat inferior in quality.

10. Performance Characteristic:
Worker's "all-around ability" to do his job.

A fairly proficient worker. Performance generally acceptable.

11. Performance Characteristic:
Worker's ability to handle several different operations in his work.

Can perform a limited number of different operations efficiently.

12. Performance Characteristic:
Worker's ability to make efficient use of his time and to work at high speed.

Capable of fair work output. Can perform at an acceptable but not a fast pace.

13. Performance Characteristic:
Worker's ability to avoid making mistakes.

Makes frequent mistakes. Work needs more checking than is desirable.

14. Performance Characteristic:
Worker's understanding of the principles, equipment, materials and methods that have to do directly or indirectly with his work.

Has little knowledge. Knows enough to "get by".

15. Performance Characteristic:
Ability to make efficient use of his time and to work at high speed.

Capable of low work output. Can perform at a slow pace.

16. Performance Characteristic:
Worker's ability to handle several different operations in his work.

Can perform several different operations with reasonable efficiency.

17. Performance Characteristic:
Worker's ability to do high-grade work which meets quality standards.

Performance was usually superior in quality.

18. Performance Characteristic:
Worker's "all-around ability" to do his job.

A valuable worker. Performance usually superior.

DESCRIPTIVE RATING SCALE FOR CROSS-VALIDATION SAMPLE #2

SUGGESTIONS TO RATERS

We are asking you to rate the job performance of the people who work for you. These ratings will serve as a "yardstick" against which we can compare the test scores in this study. The ratings must give a true picture of each worker or this study will have very little value. You should try to give the most accurate ratings possible for each worker.

These ratings are strictly confidential and won't affect your workers in any way. Neither the ratings nor test scores of any worker will be shown to anybody in your company. We are interested only in "testing the tests." Ratings are needed only for those workers who are in the test study.

Workers who have not completed their training period, or who have not been on the job or under your supervision long enough for you to know how well they can perform their work should not be rated. Please inform the test technician about this if you are asked to rate any such workers.

In making ratings, don't let general impressions or some outstanding trait affect your judgment. Try to forget your personal feelings about the worker. Rate him only on the way he does his work. Here are some more points which might help you:

1. Please read all directions and the rating scale thoroughly before rating

2. For each question compare your workers with "workers-in-general" in this job. That is, compare your workers with other workers on this job that you have known. This is very important in small plants where there are only a few workers. We want the ratings to be based on the same standard in all the plants.

3. A suggested method is to rate all workers on one question at a time. The questions ask about different abilities of the workers. A worker may be good in one ability and poor in another; for example, a very slow worker may be very accurate. So rate all workers on the first question, than rate all workers on the second question, and so on.

4. Practice and experience usually improve a worker's skill. However, one worker with six months' experience may be a faster worker than another with six years' experience. Don't rate one worker as poorer than another merely because he has not been on the job as long.

5. Rate the workers according to the work they have done over a period of several weeks or months. Don't rate just on the basis of one "good" day, one "bad" day or some single incident. Think in terms of each worker's usual or typical performance.

6. Rate only on the abilities listed on the rating sheet. Do not let factors such as cooperativeness, ability to get along with others, promptness and honesty influence your ratings. Although these aspects of a worker are important, they are of no value for this study as a "yardstick" against which to compare aptitude test scores.

Person to be Rated:_____

1. FREQUENCY OF WORK OBSERVATION:
How often do you see this worker in a work situation?

- ☐ See him at work several times a day.
- ☐ See him at work several times a week.
- ☐ Seldom see him in work situation.
- ☐ See him at work all the time.

2. LENGTH OF WORKING ACQUAINTANCE:
How long have you worked with him?

- ☐ Three to 5 months.
- ☐ One to 2 months.
- ☐ Under one month.
- ☐ Six months or more.

Person to be Rated:_____

A. QUANTITY OF WORK:
How much work can he get done?
(Worker's ability to make efficient use of his time and to work at high speed.)

- ☐ Capable of very high output. Can perform at an unusually fast pace.
- ☐ Capable of low work output. Can perform at a slow pace.
- ☐ Capable of fair work output. Can perform at an acceptable, but not fast, pace.
- ☐ Capable of high work output. Can perform at a fast pace.

B. QUALITY OF WORK:
How good is the quality of his work?
(Worker's ability to do high-grade work which meets quality standards.)

- ☐ The grade of his work could stand improvement. Performance is usually acceptable, but somewhat inferior in quality.
- ☐ Performance is usually superior in quality.
- ☐ Performance is almost always of the highest quality.
- ☐ Performance is acceptable, but usually not superior in quality.

Person to be Rated:_____

C. ACCURACY OF WORK:
How accurate is he in his work?
(Worker's ability to avoid making mistakes.)

- ☐ Rarely makes a mistake. Work almost never needs checking.
- ☐ Makes frequent mistakes. Work needs more checking than is desirable.
- ☐ Makes few mistakes. Work seldom needs checking.
- ☐ Makes mistakes occasionally. Work needs only normal checking.

D. JOB KNOWLEDGE:
How much does he know about his job?
(Worker's understanding of the principles, equipment, materials, and methods that have to do directly or indirectly with his work.)

- ☐ Has little knowledge. Knows enough to "get by".
- ☐ Has moderate amount of knowledge. Knows enough to do fair work.
- ☐ Has broad knowledge. Knows enough to do good work.
- ☐ Has complete knowledge. Knows his job thoroughly.

Person to be Rated:_____

E. APTITUDE FOR JOB:
How much aptitude or facility does he have for this kind of work?
(Worker's adeptness or knack for performing his job easily and well.)

- ☐ Usually has some difficulty doing his job. Not too well suited to this kind of work.
- ☐ Usually does his job without difficulty. Well suited to this kind of work.
- ☐ Does his job without too much difficulty. Fairly well suited to this kind of work.
- ☐ Does his job with great ease. Exceptionally well suited for this kind of work.

F. JOB VERSATILITY:
How large a variety of job duties can he perform efficiently?
(Worker's ability to handle several different operations in his work.)

- ☐ Can perform several different operations with reasonable efficiency.
- ☐ Can perform a limited number of different operations efficiently.
- ☐ Can perform many different operations efficiently.
- ☐ Can perform an unusually large variety of different operations efficiently.

Person to be Rated:_____

G. JOB RESOURCEFULNESS:
How resourceful is he when something different comes up or something out of the ordinary occurs?
(Worker's ability to apply what he already knows to a new situation.)

- ☐ Practically always figures out what to do himself. Rarely needs help.
- ☐ Usually able to handle new situations. Needs help on only complex problems.
- ☐ Often has difficulty handling new situations. Needs help on all but simple problems.
- ☐ Sometimes knows what to do; sometimes does not. Can deal with problems that are not too complex.

H. JOB INITIATIVE:
How many practical suggestions does he make for doing things in better ways?
(Worker's ability to improve work methods.)

- ☐ Quick to see new ways to improve methods. Contributes more than his share of practical suggestions.
- ☐ Neither quick nor slow to see new ways to improve methods. Contributes some practical suggestions.
- ☐ Extremely alert to see new ways to improve methods. Contributes an unusually large number of practical suggestions.
- ☐ Slow to see new ways to improve methods. Contributes few practical suggestions.

Person to be Rated:_____

1. "ALL-AROUND" JOB ABILITY:
   Considering all the factors already rated, and only these factors, how acceptable is his work?
   (Worker's "all-around ability" to do his job.)

   ☐ A valuable worker. Performance usually superior.

   ☐ A fairly proficient worker. Performance generally acceptable.

   ☐ An unusually competent worker. Performance almost always topnotch.

   ☐ Of limited value to the organization. Performance somewhat inferior.

Descriptive Rating Scale

for Cross-Validation Sample #3

SP 20
11/56

SUGGESTIONS TO RATERS

We are asking you to rate the job performance of the people who work for you. These ratings will serve as a "yardstick" against which we can compare the test scores in this study. The ratings must give a true picture of each worker or this study will have very little value. You should try to give the most accurate ratings possible for each worker.

These ratings are strictly *confidential* and won't affect your workers in any way. Neither the ratings nor test scores of any worker will be shown to anybody in your company. We are interested only in "testing the tests." Ratings are needed only for those workers who are in the test study.

Workers who have not completed their training period, or who have not been on the job or under your supervision long enough for you to know how well they can perform this work should not be rated. Please inform the test technician about this if you are asked to rate any such workers.

In making ratings, don't let general impressions or some outstanding trait affect your judgment. Try to forget your personal feelings about the worker. Rate him only on the way he does his work. Here are some more points which might help you:

1. Please read all directions and the rating scale *thoroughly* before rating.
2. For each question compare your workers with "workers-in-general" in this job. That is, compare your workers with other workers on this job that you have known. This is very important in small plants where there are only a few workers. We want the ratings to be based on the same standard in all the plants.
3. A suggested method is to rate all workers on one question at a time. The questions ask about different abilities of the workers. A worker may be good in one ability and poor in another; for example, a very slow worker may be very accurate. So rate all workers on the first question, then rate all workers on the second question, and so on.
4. Practice and experience usually improve a worker's skill. However, one worker with six months' experience may be a faster worker than another with six years' experience. Don't rate one worker as poorer than another because he has not been on the job as long.
5. Rate the workers according to the work they have done over a period of several weeks or months. Don't rate just on the basis of one "good" day, one "bad" day or some single incident. Think in terms of each worker's usual or typical performance.
6. Rate only on the abilities listed on the rating sheet. Do not let factors such as cooperativeness, ability to get along with others, promptness and honesty influence your ratings. Although these aspects of a worker are important, they are of no value for this study as a "yardstick" against which to compare aptitude test scores.

Please fill in the information requested on the reverse side of this sheet.

DESCRIPTIVE RATING SCALE

Score____

RATING SCALE FOR _____
D. O. T. Title and Code

Directions: Please read Form SP-20, "Suggestions to Raters", and then fill in the items listed below. In making your ratings, only <u>one</u> box should be checked for each question.

Name of Worker (print) _____
(Last) (First)

Sex: Male____ Female____

Company Job Title: _____

How often do you see this worker in a work situation?

☐ See him at work all the time.

☐ See him at work several times a day.

☐ See him at work several times a week.

☐ Seldom see him in work situation.

How long have you worked with him?

☐ Under one month.

☐ One to two months.

☐ Three to five months.

☐ Six months or more.

A. How much work can he get done? (Worker's ability to make efficient use of his time and to work at high speed.)

☐ 1. Capable of very low work output. Can perform only at an unsatisfactory pace.

☐ 2. Capable of low work output. Can perform at a slow pace.

☐ 3. Capable of fair work output. Can perform at an acceptable but not a fast pace.

☐ 4. Capable of high work output. Can perform at a fast pace.

☐ 5. Capable of very high work output. Can perform at an unusually fast pace.

B. How good is the quality of his work? (Worker's ability to do high-grade work which meets quality standards.)

☐ 1. Performance is inferior and almost never meets minimum quality standards.

☐ 2. The grade of his work could stand improvement. Performance is usually acceptable but somewhat inferior in quality.

☐ 3. Performance is acceptable but usually not superior in quality.

☐ 4. Performance is usually superior in quality.

☐ 5. Performance is almost always of the highest quality.

C. How accurate is he in his work? (Worker's ability to avoid making mistakes.)

☐ 1. Makes very many mistakes. Work needs constant checking.

☐ 2. Makes frequent mistakes. Work needs more checking than is desirable.

☐ 3. Makes mistakes occasionally. Work needs only normal checking.

☐ 4. Makes few mistakes. Work seldom needs checking.

☐ 5. Rarely makes a mistake. Work almost never needs checking.

D. How much does he know about his job? (Worker's understanding of the principles, equipment, materials and methods that have to do directly or indirectly with his work.)

☐ 1. Has very limited knowledge. Does not know enough to do his job adequately.

☐ 2. Has little knowledge. Knows enough to "get by."

☐ 3. Has moderate amount of knowledge. Knows enough to do fair work.

☐ 4. Has broad knowledge. Knows enough to do good work.

☐ 5. Has complete knowledge. Knows his job thoroughly.

E. How much aptitude or facility does he have for this kind of work? (Worker's adeptness or knack for performing his job easily and well.)

☐ 1. Has great difficulty doing his job. Not at all suited to this kind of work.

☐ 2. Usually has some difficulty doing his job. Not too well suited to this kind of work.

☐ 3. Does his job without too much difficulty. Fairly well suited to this kind of work.

☐ 4. Usually does his job without difficulty. Well suited to this kind of work.

☐ 5. Does his job with great ease. Exceptionally well suited for this kind of work.

F. How large a variety of job duties can he perform efficiently? (Worker's ability to handle several different operations in his work.)

☐ 1. Cannot perform different operations adequately.

☐ 2. Can perform a limited number of different operations efficiently.

☐ 3. Can perform several different operations with reasonable efficiency.

☐ 4. Can perform many different operations efficiently.

☐ 5. Can perform an unusually large variety of different operations efficiently.

G. How resourceful is he when something different comes up or something out of the ordinary occurs? (Worker's ability to apply what he already knows to a new situation.)

☐ 1. Almost never is able to figure out what to do. Needs help on even minor problems.

☐ 2. Often has difficulty handling new situations. Needs help on all but simple problems.

☐ 3. Sometimes knows what to do, sometimes doesn't. Can deal with problems that are not too complex.

☐ 4. Usually able to handle new situations. Needs help on only complex problems.

☐ 5. Practically always figures out what to do himself. Rarely needs help, even on complex problems.

H. How many practical suggestions does he make for doing things in better ways? (Worker's ability to improve work methods.)

☐ 1. Sticks strictly with the routine. Contributes nothing in the way of practical suggestions.

☐ 2. Slow to see new ways to improve methods. Contributes few practical suggestions.

☐ 3. Neither quick nor slow to see new ways to improve methods. Contributes some practical suggestions.

☐ 4. Quick to see new ways to improve methods. Contributes more than his share of practical suggestions.

☐ 5. Extremely alert to see new ways to improve methods. Contributes an unusually large number of practical suggestions.

I. Considering all the factors already rated, and only these factors, how acceptable is his work? (Worker's "all-around" ability to do his job.)

☐ 1. Would be better off without him. Performance usually not acceptable.

☐ 2. Of limited value to the organization. Performance somewhat inferior.

☐ 3. A fairly proficient worker. Performance generally acceptable.

☐ 4. A valuable worker. Performance usually superior.

☐ 5. An unusually competent worker. Performance almost always top notch.

APPENDIX 4

S-259R75

Teller (banking) 212.368

JOB DUTIES

Handles deposit and withdrawal transactions, cashes checks, government bonds and foreign drafts; issues cashier checks and accepts loan payments in a bank:

Obtains cash and materials for banking day: Obtains cash from vault or head teller. Counts and separates, by denomination, paper money and coins in cash box, and loads coin dispenser. Secures supply of forms generally used in transactions and positions them in teller's cage.

*Handles deposit and withdrawal transactions: Verifies value of bills, coins and checks received against entries on deposit slip by counting money and operating adding machines to total entries. Posts amount received on deposit or amount of withdrawal in customer's passbook if saving account transaction or issues teller machine receipt for checking account deposits. Prepares appropriate cash in or cash out slip for both saving and checking deposits. Counts amount of money withdrawn and gives to customer. Places slips and cash and check in drawer or tray.

*Cashes checks: Ascertains that check is properly signed, dated and endorsed if necessary. Verifies signature and/or endorsements against signature cards. Determines balance in account to insure balance will cover check. Contacts bank official in doubtful cases.

Handles various other transactions: Cashes government bonds by verifying signature, computing interest from chart and adding to purchase price to determine current value; cashes foreign drafts by verifying signature and following accepted procedures for identifying payee; issues cashier checks by accepting cash or check and request for cashier check from customer, inserting check form into check writer, setting levers and pressing handle to impress amount onto check, posting check number and amount onto check and check ledger book.

*Accepts loan payments: Counts cash and verifies entries and signature on checks and computes interest when necessary. Enters amount of payment and principal in customer's book or removes payment coupon from book.

*Closes out at end of banking day: Totals amount deposited, counts cash and balances day's transactions, using teller machine. Returns currency and coins to vault.

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*These job duties were designated as critical since they must be performed competently if the job is to be performed in a satisfactory manner. Tellers spend about 70% of their working hours performing these job duties.

GPO 887-926